

Information Disclosure Statement

Regarding the typographical mistake made with respect to the reference labeled "AC", a corrected PTO-1449 form has been submitted that includes the proper document number ("6,509,621") of the "AC" reference. Applicant respectfully requests consideration of this reference, as evidenced by the return of the corrected PTO-1449 with the "AC" reference initialed by the Examiner.

Allowable Subject Matter

Claims 2, 3, 5, 6, 10, and 15-17 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The Examiner's indication of allowable subject matter is gratefully acknowledged. Since independent claims 1 and 14 are in condition for allowance (as discussed below), dependent claims 2,3, 5, 6, 10, and 15-17 are allowable therewith.

Claim Rejections - 35 U.S.C. § 103

Claims 1, 4, 7, 8, 11-14 and 18-20 were rejected as being unpatentable over Kryder in view of A.A.P.A.. The Office Action sets forth that at the time of the invention it would have been obvious to one of ordinary skill in the art to modify the teachings of Kryder in view of A.A.P.A.

Requirement for Prima Facie Obviousness

In order to establish a prima facie case of obviousness, three base criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claim combination and the reasonable expectation of success must both be found in the prior art,

and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991).

I. Independent Claim 1

A. Kryder and A.A.P.A do not teach or suggest each and every claim limitation.

Independent claim 1 recites a method of writing to a magnetic media, the method comprising “embedding a second component in the write current to generate a high frequency magnetic field, the magnetic write field and the high frequency magnetic field being controlled to create an area of magnetic resonance within the magnetic media . . .” The Office Action states (with respect to independent claim 14, and applied to independent claim 1) that Kryder “fails to explicitly show a write current generating circuit configured to generate a write current with first and second components,” but that it is “well known in the art as disclosed by Applicant in the specification of the current application (FIG. 2) that first and second components of a write current may be produced through a single write current generating circuit instead of two separate circuits as shown in Kryder.”

It is believed that the above statements were based on remarks made by the Applicant in response to the Office Action mailed on September 29th, 2005. Specifically, the Applicant stated that “because the write current [104] includes both the first component [106] for generating a magnetic write field, and a second component [103] for generating a high frequency magnetic field, the write current described by independent claim 1 can be produced by a typical magnetic writer (such as PRIOR ART illustration shown in FIG. 2) having a single coil.” Applicant would like to clarify that a write current having a first component and a second component can be provided to a typical magnetic writer having a single coil as shown in FIG. 2. By “embedding a second component in the write current” as required by independent claim 1, the write current may be provided to a typical magnetic writer having a single coil.

The A.A.P.A. (Published Application No. 2005/0207050) describes with respect to FIG. 2 a “magnetic writer 40 [that] includes a top pole 42, a bottom pole 44, a top via 46, and a conductive coil 48 . . . A write current 50, driven through the conductive coil 48, will generate a magnetic field 52.” (US. Pat. Appl. No. 2005/0207050, Paragraph 0016). Therefore, the A.A.P.A. merely describes the structure of a typical magnetic writer having a single coil capable of receiving a provided write current. The A.A.P.A.

does not teach or suggest a magnetic writer for “embedding a second component in the write current to generate a high frequency magnetic field” as required by independent claim 1.

Furthermore, “embedding a second component in the write current” is an improvement over Kryder, which requires a separate loop of wire to establish both the global static magnetic field and the global radio frequency field. (Col. 5, ll. 39-45). Thus, a benefit of “embedding the second component in the write component” is that the write current could be provided to a typical magnetic writer having a single coil for carrying the write current. However, the typical magnetic writer disclosed in the current application (FIG. 2) does not teach or suggest “embedding the second component in the write current” as required by independent claim 1. It is only the present invention that teaches embedding a second component in a write current to generate a high frequency magnetic field. Therefore, the combination of Kryder and A.A.P.A. does not teach or suggest every element of independent claim 1.

II. Dependent Claims 4, 7, 8, and 11-13

Dependent claims 4, 7, 8, and 11-13 were also rejected under 35 U.S.C. § 103(a) as being unpatentable over Kryder in view of A.A.P.A.. As discussed above, the combination of Kryder and the A.A.P.A. does not teach or suggest every element of independent claim 1. Therefore, independent claim 1 is in condition for allowance. Claims 4, 7, 8, and 11-13 depend from independent claim 1. As such, the claims are allowable with their independent base claim since any claim depending from a patentable independent claim is also patentable. See M.P.E.P. 2143.03, citing In re Fine, 5 U.S.P.Q.2d (BNA) 1596 (Fed. Cir. 1988).

III. Dependent Claim 9

Dependent claim 9 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Kryder as modified by A.A.P.A. and further in view of Pelhos. Claim 9 depends from independent claim 1. As such, the claim is allowable with the independent base claim since any claim depending from a patentable independent claim is also patentable. See M.P.E.P. 2143.03, citing In re Fine, 5 U.S.P.Q.2d (BNA) 1596 (Fed. Cir. 1988).

IV. Independent Claim 14

A. The Prior Art Does Not Teach or Suggest All Claim Limitations

Independent claim 14 recites “a write current generating circuit for generating the write current with a first component generating the magnetic write field and a second component generating a high frequency magnetic field . . .” The Office Action states that Kryder “fails to explicitly show a write current generating circuit configured to generate a write current with first and second components,” but that it is “well known in the art as disclosed by Applicant in the specification of the current application (FIG. 2) that first and second components of a write current may be produced through a single write current generating circuit instead of two separate circuits as shown in Kryder.”

For the reasons provided above with respect to independent claim 1, the combination of Kryder and A.A.P.A. does not teach or suggest “*a write current generating circuit* for generating the write current with a first component generating the magnetic write field and a second component generating a high frequency magnetic field . . .” (emphasis added) as required by independent claim 14.

Furthermore, A.A.P.A. (Published Application No. 2005/0207050) describes with respect to FIG. 2 a “magnetic writer 40 includes a top pole 42, a bottom pole 44, a top via 46, and a conductive coil 48 . . . A write current 50, driven through the conductive coil 48, will generate a magnetic field 52. The direction of the write current 50 dictates the direction of the magnetic write field 52 and the magnitude of the write current 50 dictates the magnitude of the magnetic write field 52.” (US. Pat. Appl. No. 2005/0207050, Paragraph 0016). The A.A.P.A. does not teach or suggest a “write current generating circuit for generating the write current with a first component generating the magnetic write field and a second component generating a high frequency magnetic field . . .” Therefore, the combination of Kryder and A.A.P.A. does not teach or suggest every element of independent claim 14.

V. Dependent Claims 18-20

Dependent claims 18-20 were also rejected as anticipated by the Kryder reference. Claims 18-20 depend from independent claim 14. As discussed above, the combination of Kryder and the A.A.P.A. does not teach or suggest every element of independent claim 14. Therefore, independent

claim 14 is in condition for allowance. As such, dependent claims 18-20 are allowable with their independent base claim since any claim depending from a patentable independent claim is also patentable. See M.P.E.P. 2143.03, citing In re Fine, 5 U.S.P.Q.2d (BNA) 1596 (Fed. Cir. 1988).


Conclusion

In view of the foregoing, all pending claims 1-20 are in condition for allowance. A Notice to that effect is respectfully requested.

Respectfully submitted,

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